

#### March 27, 2002

California Energy Commission Docket Office Attention Docket 97-DC&CR-1 1516 Ninth Street, MS-4 Sacramento, California 95814-5512

RE: Docket No. 99-DIST-GEN-(2)

Southern California Edison Company's (U 338-E) Comments on the Siting Committee's Draft Outline for a Strategic Plan for Distributed Generation

**Dear Commission:** 

Attached are Southern California Edison Company's Comments on the Siting Committee's Draft Outline for a Strategic Plan for Distributed Generation.

If you have any questions regarding this filing, please contact the undersigned.

Very truly yours,

Michael D. Montoya

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Enclosure(s)

cc: Scott Tomashefksy Commissioner Robert A. Laurie Commissioner Robert Pernell



bcc: Tambre Doyle

# SOUTHERN CALIFORNIA EDISON'S COMMENTS ON THE SITING COMMITTEE'S DRAFT OUTLINE FOR A STRATEGIC PLAN FOR DISTRIBUTED GENERATION

#### INTRODUCTION

SCE supports the development of cost-effective distributed generation (DG) and allowing consumers to make informed choices about DG. To make informed choices about DG, consumers need accurate and objective information. Thus, SCE cannot underscore enough how important it is for the CEC to complete a full, objective evaluation and assessment of the effects of DG.

In general, SCE believes the Siting Committee's Draft Outline regarding the CEC's Strategic Plan for Distributed Generation (Draft Outline) represents a good starting place in the quest to better understand DG technologies. SCE offers the following comments on the Draft Outline and looks forward to the opportunity to participate in hearings and provide comments on the Strategic Plan.

# PURPOSE AND SCOPE OF DISTRIBUTED GENERATION STRATEGIC PLAN

In stating the purpose and scope of the Strategic Plan for Distributed Generation, the Siting Committee outlines its intentions to:

 Articulate the Energy Commission's vision of the future relating to distributed generation;

- Identify issues and opportunities affecting the likelihood of the vision being realized;
- Recommend policies and strategies that will address the issues and opportunities that will make the Energy Commission's vision a reality; and
  - Provide guidance to other state agencies about policies and strategies within their respective jurisdictions that would contribute to realizing the vision.

A key element that is missing from the Siting Committee's statement of purpose and scope for its Strategic Plan for DG is the need to evaluate and assess distributed generation technologies to develop an objective information database to help all stakeholders better understand the technology and the effects it will have on the distribution system. The CEC must recognize that its success in being able to identify issues, recommend policies and strategies, and provide guidance to others ultimately rests on its ability to develop accurate and objective information regarding DG. In developing a Strategic Plan for DG, SCE recommends that the CEC add the following objective as part of its purpose and scope: "Research and evaluate distributed generation technologies including such characteristics as environmental factors, efficiency, reliability, commercial availability, installation and on-going operational costs (without direct or indirect incentives), comparison of DG technologies with alternatives (e.g., new central station power plants), impacts on gas supply and pricing in California, impacts on cost-shifting, and effects on the distribution system."

### VISION, MISSION, AND PRINCIPLES

While the CEC may find it meaningful to identify its "vision of the future relating to distributed generation," the CEC must only draw conclusions

regarding the value and appropriate applications for DG *after* it completes all necessary analysis and fact finding. In this way, the CEC will ensure that its policies and recommendations are based on concrete information rather than untested assumptions or subjective preferences.

Thus, SCE believes it is premature, at this time, for the CEC to declare as its vision: "Distributed generation will be an integral part of the California energy system, providing consumers and energy providers with affordable, clean, reliable, and readily accessible energy services." The CEC's vision should be to determine whether DG can and should become an integral part of the California energy system.

SCE proposes the following modification to the CEC's proposed vision statement to reflect the CEC's vision for DG: "Distributed generation will be evaluated among the many components of a highly reliable, efficient, secure, economic, and environmentally responsible energy supply system." As a statement of the CEC's desired future-state for DG, this revised vision statement is appropriate because it recognizes the importance of exploring the various DG technologies for the benefit of consumers and energy providers, and allows the CEC to be responsibly proactive in its support of DG.

In addition to the three principles listed in the Draft Outline (i.e., environmental preservation, private investment, and increased consumer choice), SCE recommends that the development of DG should be guided by the following additional principles:

Safe and reliable integration with the utility grid. - If DG is going to be
installed on the customer's side of the meter, it must be interconnected
with the utility grid in a manner which does not cause operating
problems on the transmission and distribution system and which
protects the safety of the public and utility employees.

<u>Consumer Protection</u>. - It is not enough to simply provide consumers
with more choices. They must be educated so that they are well
informed and protected from unfair or abusive marketing practices.

#### **DEPLOYMENT ISSUES AND OPPORTUNITIES**

All of the questions the Siting Committee poses in this section of the Draft Outline show insight into the issues that need to be addressed. SCE urges the CEC to address all of these questions and issues in its analysis of DG.

The Draft Outline states its intention to "identify the major barriers hindering the deployment of distributed generation in California." In addition to the four areas the Siting Committee identifies in the Draft Outline (Interconnection Issues, Environmental Issues, Grid Effect Issues, and Market Integration and Regulatory Issues), the CEC should also assess whether there are characteristics inherent in the various DG technologies that may deter deployment and use of DG in California. In order for distributed generation technologies to be deployed in significant volume, they must be competitive from a cost and performance perspective and must not rely on government incentives or distortions in utility rates to justify their installation.

#### **Interconnection Issues**

SCE supports and implements an expedited interconnection processes for DG. In a nutshell, applicants desire an interconnection process that is fast and cheap; utilities are primarily concerned with customer and employee safety and protecting the integrity of the distribution system.

SCE agrees that there is a need to understand the effects of interconnecting substantial amounts of DG on both radial and networked distribution systems, including safety, reliability, and cost concerns. Because there has not been a high penetration level of DG on the grid to analyze, there is a

need to conduct research, modeling, and testing to discover how distribution systems are affected at different levels of DG interconnection. However, real knowledge of how the distribution system will respond is best achieved through field experience. Recognizing that there may be risks to customer reliability, SCE recommends the CEC consider how best to gain the field experience needed to effectively evaluate these interconnection issues.

## **Environmental Issues**

When the CEC addresses whether preference should be given to "clean" DG technologies, it is important to clarify and define what constitutes "clean." Giving preference to clean technologies should be balanced with considerations such as cost-effectiveness, location, infrastructure, reliability, fuel availability, etc. The best technology may not always be the cleanest.

In addition to the effects of DG on air quality, the CEC should also address the following questions regarding environmental issues:

- What are the effects of DG on land use and zoning?
- What are the effects of DG on noise abatement?
- What are the effects of expanding gas facilities to support gas-fired DG technologies?

### **Grid Effects Issues**

As previously discussed, the utility is concerned about public and employee safety and protecting the integrity of the distribution system. It is essential that all stakeholders understand the effects of DG to the distribution system. In addition to the questions listed in the Draft Outline, SCE urges the CEC to assess the following:

How does bulk deployment of DG effect reliability in localized areas?

- What are the effects of DG on service restoration following an outage?
- What is the definition of a micro-grid?
- What are the operational, regulatory, economic and legal implications of owner-tenant micro-grids?

# **Market Integration**

Although the outline considers the impacts of integrating DG into the electricity market, the outline is silent on the implications of higher levels of DG on natural gas markets. Thus, if the potential scenarios include a wide proliferation of natural gas-fired DG, the Commission should include among its issues the following: How would the widespread use of gas-fired DG impact the wholesale natural gas market and natural gas distribution infrastructure?

# POTENTIAL ROLE OF GOVERNMENT IN ADDRESSING ISSUES AND OPPORTUNITIES

The CEC identified the six potential roles for government in the development and deployment of DG: plan/coordinate, purchase, incent, regulate, educate, and be entrepreneurial. The CEC needs to consider whether the role of government as entrepreneur is a conflict of interest with government's potential other roles.

### STRATEGY OPTIONS AND GOALS FOR THE ENERGY COMMISSION

The Draft Outline identified several leadership opportunities for the CEC regarding the development and deployment of DG: technical and policy analyses, R&D funding, renewables funding, building standards, information source, and coordinate activities across state agencies. SCE believes the two most important functions that the CEC can perform regarding the

development of DG at this time are technical and policy analyses and information source. Arguably, the CEC should base any conclusions, recommendations, or actions on its analysis of objective information. To do otherwise would be to act based on "shaky assumptions" that have the potential for dire consequences for the safety and reliability of the distribution system. It is imperative that the CEC not shortcut these important steps in a haste to facilitate the deployment of DG.

#### **CONCLUSION**

Over the next several years, advancements in technology may result in less expensive and more efficient small generating machines. Given these anticipated advancements, DG has the potential for an increased contribution to the electric industry both as a competitive generation resource for customers and as an on-grid technology option for utilities. SCE supports the development of cost-effective DG, recognizing that we all lose if we fail to responsibly explore opportunities for the appropriate use of this technology.

The Siting Committee should neither advocate nor promote DG. Its role should not be to either encourage or discourage the deployment of DG, but rather to be an information repository from which state policymakers may access information for use in developing energy policies. The primary goal of the CEC should be to evaluate and assess distributed generation technologies. In the interest of all stakeholders, it is the most important thing the CEC can do at this time.